

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IB 03/04889

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H05B37/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 05, 14 September 2000 (2000-09-14) & JP 2000 036392 A (TOSHIBA TEC CORP), 2 February 2000 (2000-02-02) abstract; figures 1-9	1,5,7,9
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 20, 10 July 2001 (2001-07-10) & JP 2001 060406 A (MATSUSHITA ELECTRIC WORKS LTD), 6 March 2001 (2001-03-06) abstract; figures 1-3	1,5,7,9
E	US 2003/218537 A1 (LANG ANDREW KENNEDY ET AL) 27 November 2003 (2003-11-27) page 1, paragraph 6 -page 2, paragraph 15; figures 1-11	1,5,7,9
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

29 January 2004

Date of mailing of the international search report

09/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Albertsson, E

## INTERNATIONAL SEARCH REPORT

Internationa Application No  
PCT/IB 93/04889

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11, 26 December 1995 (1995-12-26) & JP 07 201205 A (USHIO UTEC:KK), 4 August 1995 (1995-08-04) abstract; figures 1-4 ---	1,7,9
A	WO 96 20369 A (ECO DESIGN FOUNDATION INC ;MERCER REGINALD L (AU); FRY ANTHONY H ( ) 4 July 1996 (1996-07-04) page 1, line 16 -page 5, line 19; figures 1-2M ---	1,3-5,7, 9
A	US 4 575 660 A (SPIRA JOEL S ET AL) 11 March 1986 (1986-03-11) column 1, line 34 -column 4, line 21; figures 1-3 ---	1,6,7,9
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 19, 5 June 2001 (2001-06-05) & JP 2001 043982 A (MATSUSHITA ELECTRIC WORKS LTD), 16 February 2001 (2001-02-16) abstract ---	
A	US 5 187 655 A (POST ROBERT P ET AL) 16 February 1993 (1993-02-16) -----	

## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/IB 03/04889

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2000036392 A	02-02-2000	NONE	
JP 2001060406 A	06-03-2001	NONE	
US 2003218537 A1	27-11-2003	WO 03100568 A2	04-12-2003
JP 07201205 6 A		NONE	
WO 9620369 A	04-07-1996	AU 4324296 A WO 9620369 A1	19-07-1996 04-07-1996
US 4575660 A	11-03-1986	CA 1243728 A1 DE 3430938 A1 FR 2551301 A1 GB 2145586 A ,B GB 2174848 A ,B JP 60084794 A SG 28988 G US 4727296 A	25-10-1988 14-03-1985 01-03-1985 27-03-1985 12-11-1986 14-05-1985 30-09-1988 23-02-1988
JP 2001043982 A	16-02-2001	NONE	
US 5187655 A	16-02-1993	NONE	